

Newsletter, March 2012

Management Committee and Working groups meetings of COST Plasmonics will be co-located with E-MRS Spring 2012 meeting, May 15, Strasbourg, France
Symposium O: Applied Nanoplasmonics: Nanoplasmonic Functional Materials and Devices
http://www.emrs-strasbourg.com/index.php?option=com_content&task=view&Itemid=132&id=480
- special one-day session 'Plasmonic Nanoantennas' (jointly with Symposium N).
If you would like to attend and be reimbursed - please, send a note to alex@chalmers.se

During the meeting there will be given an outlook to FP7 MNP: FP7 NMP Call 2013 and the next framework program, by Dr. Patrick Furrer- <http://www.euresearch.ch/>

Core-group meeting of COST Plasmonics will be co-located with SPIE Photonics Europe, 16 - 19 April 2012, Square Brussels Meeting Centre, Brussels, Belgium
<http://spie.org/app/program/index.cfm?fuseaction=conferencedetail&conference=8424>
April 18th, late afternoon

New partner COST Action: Nanoscale insights into Ion Beam Cancer Therapy, Nano-IBCT. The Action focuses on biomedical applications of nanoparticles and study plasmon excitations in atomic clusters and nanoparticles, among other subjects. We are welcoming exploratory STSMs between the partners of both networks.
<http://fias.uni-frankfurt.de/nano-ibct/>

STSM: Short term Scientific Missions - if you plan a short (up to 6 months) visit to the partners lab - this is the instrument. Documents to be submitted to STSMs Coordinator Dorota Pawlak: Dorota.Pawlak@itme.edu.pl:
- CV of the applicant
- Acceptance letter of the host
- Work plan
- On-line application (for the form - please, contact Dorota)

COST Plasmonics sponsors the joint publications of the partners as 'Open Access' with various publishers (NPG, ACS, Wiley etc.). Please, send you enquiries to alex@chalmers.se

Every partner is welcome to submit the entries to Papers, Jobs and Events sections.

Papers

Acoustic Vibrations in Bimetallic Au@Pd Core-Shell Nanorods
M.F. Cardinal, D. Mongin, A. Crut, P. Maioli, B. Rodríguez-González, J. Pérez-Juste, L.M. Liz-Marzán, N. Del Fatti, F. Vallée
J. Phys. Chem. Lett. 3, 613 (2012)
<http://pubs.acs.org/doi/abs/10.1021/jz3000992>

Self-Assembled Supercrystals: New optical platforms for ultrasensitive SERS diagnostics
R.A. Alvarez-Puebla, E.R. Zubarev, N.A. Kotov, L.M. Liz-Marzán
Nano Today 7, 6 (2012), doi: 10.1016/j.nantod.20N1A1N.T1O1D.02021

High aspect subdiffraction-limit photolithography via a silver superlens
H. Liu, B. Wang, L. Ke, J. Deng, C. C. Choy, S. L. Teo, L. Shen, S. A. Maier & J. Teng

Nano Lett. 12, 1549 (2012)

<http://pubs.acs.org/doi/abs/10.1021/nl2044088>

Spoof plasmon polaritons in slanted geometries

J. J. Wood, L. A. Tomlinson, O. Hess, S. A. Maier, & A. I. Fernández-Domínguez

Phys. Rev. B 85, 075441 (2012)

<http://prb.aps.org/abstract/PRB/v85/i7/e075441>

Directional excitation of surface plasmon polaritons via nanoslits under varied incidence observed using leakage radiation microscopy

Y. Sonnefraud, S. Kerman, G. Di Martino, D. Y. Lei, & S. A. Maier

Opt. Exp. 20, 4893 (2012)

<http://www.opticsinfobase.org/oe/abstract.cfm?uri=oe-20-5-4893>

Transformation-Optics Description of Nonlocal Effects in Plasmonic Nanostructures

A. I. Fernández-Domínguez, A. Wiener, F. J. García-Vidal, S. A. Maier, & J. B. Pendry

Phys. Rev. Lett. 108, 106802 (2012)

<http://prl.aps.org/abstract/PRL/v108/i10/e106802>

Spectroscopic ellipsometry as an optical probe of strain evolution in ferroelectric thin films

D. Y. Lei, S. Kéna-Cohen, B. Zou, P. K. Petrov, Y. Sonnefraud, J. Breeze, S. A. Maier & N. M. Alford

Opt. Exp. 20, 4419 (2012)

<http://www.opticsinfobase.org/oe/abstract.cfm?uri=oe-20-4-4419>

Multi-dimensional modeling of solar cells with electromagnetic and carrier transport calculations

X. Li, N. P. Hylton, V. Giannini, K.-H. Lee, N. J. Ekins-Daukes & S. A. Maier

Prog. Photovolt: Res. Appl., DOI: 10.1002/pip.2159

<http://onlinelibrary.wiley.com/doi/10.1002/pip.2159/abstract>

Plasmonic systems unveiled by Fano resonances

Y. Francescato, V. Giannini & S. A. Maier

ACS Nano 6, 1830 (2012)

<http://pubs.acs.org/doi/abs/10.1021/nn2050533>

Nanoplasmonics: classical down to the nanometer scale

H. Duan, A. I. Fernández-Domínguez, M. Bosman, S. A. Maier & J. K. W. Yang

Nano Lett. 12, 1683 (2012)

<http://pubs.acs.org/doi/abs/10.1021/nl3001309>

Voltage-Induced Adsorbate Damping of Single Gold Nanorod Plasmons in Aqueous Solution

S. K. Dondapati, M. Ludemann, R. Müller, S. Schwieger, A. Schwemer, B. Händel, D.

Kwiatkowski, M. Djiango, E. Runge, and T. A. Klar

Nano Lett. 12, 1247 (2012)

<http://pubs.acs.org/doi/abs/10.1021/nl203673g>

Ultralocal Modification of Surface Plasmons Properties in Silver Nanocubes

S. Mazzucco, N. Geuquet, J. Ye, O. Stéphan, W. Van Roy, P. Van Dorpe, L. Henrard, and Ma. Kociak

Nano Lett. 12, 1288 (2012)

<http://pubs.acs.org/doi/abs/10.1021/nl2037672>

Quantum Plasmonics: Nonlinear Effects in the Field Enhancement of a Plasmonic Nanoparticle Dimer

D.C. Marinica, A.K. Kazansky, P. Nordlander, J. Aizpurua, and A. G. Borisov

Nano Lett. 12, 1333 (2012)

<http://pubs.acs.org/doi/abs/10.1021/nl300269c>

Classical Analog of Electromagnetically Induced Absorption in Plasmonics

R. Taubert, M. Hentschel, J. Kästel, and H. Giessen

Nano Lett. 12, 1367 (2012)

<http://pubs.acs.org/doi/abs/10.1021/nl2039748>

Low-Temperature Plasmonics of Metallic Nanostructures

J.-S. G. Bouillard, W. Dickson, D. P. O'Connor, G. A. Wurtz, and A. V. Zayats

Nano Lett. 12, 1561 (2012)

<http://pubs.acs.org/doi/abs/10.1021/nl204420s>

Boosting the Figure-Of-Merit of LSPR-Based Refractive Index Sensing by Phase-Sensitive Measurements

K. Lodewijks, W. Van Roy, G. Borghs, L. Lagae, and P. Van Dorpe

Nano Lett. 12, 1655 (2012)

<http://pubs.acs.org/doi/abs/10.1021/nl300044a>

Plasmonic Nanoclusters: Near Field Properties of the Fano Resonance Interrogated with SERS

J. Ye, F. Wen, H. Sobhani, J. B. Lassiter, P. Van Dorpe, P. Nordlander, and N. J. Halas

Nano Lett. 12, 1660 (2012)

<http://pubs.acs.org/doi/abs/10.1021/nl3000453>

Molecular scattering and fluorescence in strongly confined optical fields. spectroscopy, sensing and signal processing

M. Agjo

Habilitationsschrift ETH Zürich (2011)

<http://dx.doi.org/10.3929/ethz-a-007049705>

Non-exponential decay of dark localized surface plasmons

P. Ginzburg and A. V. Zayats

Opt. Exp. 20, 6720 (2012)

<http://www.opticsinfobase.org/oe/abstract.cfm?URI=OPEX-20-6-6720>

Analysis of damping-induced phase flips of plasmonic nanowire modes

A. Hohenau, P. Kusar, C. Gruber, and J. R. Krenn

Opt. Lett. 37, 746 (2012)

<http://www.opticsinfobase.org/ol/abstract.cfm?uri=ol-37-4-746>

Jobs

Postdoc position in ultrafast optics and magneto(sp)plasmonics (plasmonics + magnetism) at Chalmers, Göteborg, Sweden

This postdoc position is within our new line of research – combination of nanoplasmonic and ferromagnetic materials = magnetoplasmonics that also spills into spintronics research. We primarily use spectroscopic magneto-optical Kerr effect (MOKE) to characterize the interaction of plasmons and magnetization in nanoferrromagnets. Within this project we will expand our MOKE capabilities with the resolution in fs- time domain.

Requirements: Previous experience with ultrafast optical studies is a prerequisite. Strong interest / previous experience in nanooptics / nanoplasmonics as well as in time-resolved MOKE is a merit.

Application deadline: May 1st, 2012; position starts ASAP.

Contact: Alexandre 'Sascha' Dmitriev, alex@chalmers.se

<http://www.chalmers.se/ap/EN/research/bionanophotonics/research/functional>

PhD position in magneto(sp)plasmonics (plasmonics + magnetism) at Chalmers, Göteborg, Sweden

This graduate-level position continues a new line of research – combination of studies of nanoplasmonics and nanomagnetism. We aim to develop functional nanostructures where magnetism and nanoplasmonics can be mutually manipulated.

Application deadline: May 1st, 2012; position starts ASAP.

Contact: Alexandre 'Sascha' Dmitriev, alex@chalmers.se

<http://www.chalmers.se/ap/EN/research/bionanophotonics/research/functional>

Events

EUPROMETA Doctoral School on Metamaterials: Introduction to metamaterials

May 7-11 2012, Louvain-la-Neuve, Belgium

<http://school.metamorphose-vi.org/>

International Brokerage Event with F2F meetings: a platform to initiate international R&D projects in nanotechnologies, materials and industrial processes and to boost the innovation. The event is supported by the European Commission.

May 24, Lausanne, Switzerland

Registration deadline: April 25, 2012

<http://www.b2match.eu/meetatnano/>

Active Plasmonics symposium at IEEE Summer topicals in Seattle, USA

July 9-11, 2012

<http://www.sum-ieee.org/>

Optics Within Life Sciences (OWLS), Genoa, Italy

July 4-6, 2012

<http://www.owls2012.org/>

NFO12: Near-field Optics, Nanophotonics and Related Techniques 2012

September 3-6, 2012, Donostia – San Sebastian, Basque Country, Spain

Abstracts submission: April 26, 2012.

<http://www.nfo12.org>

2012 Gordon Research Conference: Plasmonics

June 10-15, 2012, Colby College, Waterville, ME, USA

Application: May 13, 2012

<http://www.grc.org/programs.aspx?year=2012&program=plasmonics>

International school of quantum electronics, Advances on nanophotonics IV

July 17-29 2012, Erice – Sicily, Italy

<http://w3.uniroma1.it/nanophotonic/>

Registration deadline: June 15, 2012

[Partner network event, COST Action Nano-IBCT]

Symposium on atomic cluster collisions

July 18-23, 2013, Wuhan-Chongqing, China

<http://fias.uni-frankfurt.de/isacc/>

Previous meeting of the series: <http://fias.uni-frankfurt.de/isacc2011/index.php/>